

1 MKDVESGRGRVLLNSAAARGDGLLLLGTRAATLGGGGGLRESRRGKQGA konq5-  
 1 MKDVESGRGRVLLNSAAARGDGLLLLGTRAATLGGGGGLRESRRGKQGA konq5-  
 51 RNSLLGKPLSYTSSQSCRRNVKYRRVQNYLYNVLERPRGWAFIYHAFVFL konq5-  
 51 RNSLLGKPLSYTSSQSCRRNVKYRRVQNYLYNVLERPRGWAFIYHAFVFL konq5-  
 101 LVFGCLILSVFSTIPEHTKLASSCLLILEFVNIIVVFGLEPIIRINSAGCC konq5-  
 101 LVFGCLILSVFSTIPEHTKLASSCLLILEFVNIIVVFGLEPIIRINSAGCC konq5-  
 151 CRYRGWQGLRLRFARKPFPCVIDTIVLIASIAVVSAKTOGNIFATSALRSLE konq5-  
 151 CRYRGWQGLRLRFARKPFPCVIDTIVLIASIAVVSAKTOGNIFATSALRSLE konq5-  
 201 FLQILRMVVRMDRRGGTWKLLGSGVVYAHSKELITAWYIGFLVLIFSSFLVY konq5-  
 201 FLQILRMVVRMDRRGGTWKLLGSGVVYAHSKELITAWYIGFLVLIFSSFLVY konq5-  
 251 LVEKDANKEFSTYADALWNGTITLTITIGYQDKTPTLTLWGLRLSAGFALLG konq5-  
 251 LVEKDANKEFSTYADALWNGTITLTITIGYQDKTPTLTLWGLRLSAGFALLG konq5-  
 301 ISFFALPAGILGSGFALKVQEQHROKHFEKRRNPAANLIQCVNRSYAADE konq5-  
 301 ISFFALPAGILGSGFALKVQEQHROKHFEKRRNPAANLIQCVNRSYAADE konq5-  
 351 KSVSIATWKPHLKALHTCSPTKKEGGEASSSQKLSFKERVVRMASPRGQSI konq5-  
 351 KSVSIATWKPHLKALHTCSPTN-----QKLSFKERVVRMASPRGQSI konq5-  
 401 KSRQASVGDRRSPTDITAEQSPTKVQKSWSFYNDRTTRFPDLSLKLKSSQPK konq5-  
 392 KSRQASVGDRRSPTDITAEQSPTKVQKSWSFYNDRTTRFPDLSLKLKSSQPK konq5-  
 451 FVIDADTALGTDDVYDEKGCQCDVSVEDLTPFLKTVIRAIRIMKFHVAKR konq5-  
 442 FVIDADTALGTDDVYDEKGCQCDVSVEDLTPFLKTVIRAIRIMKFHVAKR konq5-  
 501 KFKETLRPYDVXDVIEQYSAGHLDMLCRIKSLQTRVDQILGKGQITSDKK konq5-  
 492 KFKETLRPYDVXDVIEQYSAGHLDMLCRIKSLQTRVDQILGKGQITSDKK konq5-  
 551 BREKITAEHETTDLDSMLGRVVKVEKQVQSIKSLDCLLDIYQQVLRKGS konq5-  
 542 BREKITAEHETTDLDSMLGRVVKVEKQVQSIKSLDCLLDIYQQVLRKGS konq5-  
 601 ASALALASFQIIPFFECQTSQSPVDSKDLGSAQNSGCLSRSTSAHIS konq5-  
 592 ASALALASFQIIPFFECQTSQSPVDSKDLGSAQNSGCLSRSTSAHIS konq5-  
 651 RGLQFILIPNEFSAQTFYALSPTMHSQATQVPIQSQDGSAAVAATNTIANQ konq5-  
 742 RGLQFILIPNEFSAQTFYALSPTMHSQATQVPIQSQDGSAAVAATNTIANQ konq5-  
 801 INTAPKPAAPTTLQIIPPLPAIKHLRPFETLHPNPAGLOQESISDVTTCLV konq5-  
 692 INTAPKPAAPTTLQIIPPLPAIKHLRPFETLHPNPAGLOQESISDVTTCLV konq5-  
 751 ASKENVQVAQSNLTKDRSMRKSFDMGGETLLSVCPMVPKDLGKSLSVQNL konq5-  
 742 ASKENVQVAQSNLTKDRSMRKSFDMGGETLLSVCPMVPKDLGKSLSVQNL konq5-  
 801 IRSTEELNIQLSGSESSGSRGSGQDFYFKWRBSKLPITDREVGPEETETD konq5-  
 792 IRSTEELNIQLSGSESSGSRGSGQDFYFKWRBSKLPITDREVGPEETETD konq5-  
 851 FDAAPQAPAREAAASDSLRGTGRSRSSQSIKAGESTDALSLPHVKLK konq5-  
 842 FDAAPQAPAREAAASDSLRGTGRSRSSQSIKAGESTDALSLPHVKLK konq5-

Decoration 'Decoration #1': Shade (with solid black) residues that match konq5-1.PRO

Figure 1

1 NKDVESGRGVLLNSAAARGDGLLLGTRAAATLGGGGLRESRRKQGAHMSLQKPS kcnq5.PF  
1 MVQ-KSNGGVVGGSGEKKLVGVVGLDPPGAPDSTRDGAALLIAGSBAKPGSILPKRA kcnq2.PF  
1 MAEAPPRLGLGPPGDAAPRAELVALTAVQSSQGEAGGGSPRBLGLGLSPLPPGADP kcnq4.PF

61 ---YTSQSRRH-----NVYRRVQNYLYNVLERPRGWAFIYHAFVFLLVFGCLLVSVP kcnq5.PF  
60 GAGAGAKPKPKNAF-----YRKQNFLLYNVLERPRGWAFIYHAFVFLLVFSCLLVSVP kcnq2.PF  
60 GPSSGSGSACQGRSSAAHKRYRRLQNWYVNVLERPRGWAFIYHAFVFLLVFSCLLVSVP kcnq4.PF

113 TFSHTKLASSCLLILEFVIMLVFGLFPIRINSAGCCCRYRGWQGRLEFARKPFPCVIDI kcnq5.PF  
114 THTHTKASSGALLILFVGVVGVVGLDPPGAPDSTRDGAALLIAGSBAKPGSILPKRA kcnq2.PF  
120 TIOHQGFANSCCLLILEFVIMLVFGLFPIRINSAGCCCRYRGWQGRLEFARKPFPCVIDI kcnq4.PF

173 LVLTASTAVVSKTKQNFIFATSAIRSLRFLQILRMVMRMDRRGGTQKLLGSSVVAHAKSEL kcnq5.PF  
174 MVLTIASIAVLNAGSQCNVIFATSAIRSLRFLQILRMIMDRRGGTQKLLGSSVVAHAKSEL kcnq2.PF  
180 LVFVAVSVIAAGTQCNIFATSAIRSLRFLQILRMVMRMDRRGGTQKLLGSSVVAHAKSEL kcnq4.PF

233 TAWYIGFLVLIESFLVYLVEKDAKKEFSTYADALWNGTITLTITIGYGDKTPLTWLGRLL kcnq5.PF  
234 TAWYIGFLCLILASFLVYLAKKGEHDFSTYADALWNGTITLTITIGYGDKTPLTWLGRLL kcnq2.PF  
240 TAWYIGFLVLIFASFLVYLAKKDAKDFSSYADSLWNGTITLTITIGYGDKTPLTWLGRLL kcnq4.PF

293 SAGFALLGTSFPALFAGILGSGFALKVQEQHRRKHFEKRRNPAANLQCVVRVSVAADLSEK kcnq5.PF  
294 AAVQFALGTSFPALFAGILGSGFALKVQEQHRRKHFEKRRNPAAGLQSAWRFYATNLS kcnq2.PF  
300 AAGFALLGTSFPALFAGILGSGFALKVQEQHRRKHFEKRRNPAANLQAAWALYSTDMSR kcnq4.PF

352 SVSIAATL-----KPLKKAH----- kcnq5.PF  
354 TDTHSTQVYERATVTVPMYLIPPTNQLELLRLNKLKSGLAFAFKKTPPEPSPS----- kcnq2.PF  
360 AYVATATVYYSIL--PSFLKALDFERVQARNGGMRP-LVVRRAIPVDDGAPSRYPYPAV kcnq4.PF

417 ECTSPTEKQGRASSFLVYVLEKDAKKEFSTYADALWNGTITLTITIGYGDKTPLTWLGRLL kcnq5.PF  
417 ECTSPTEKQGRASSFLVYVLEKDAKKEFSTYADALWNGTITLTITIGYGDKTPLTWLGRLL kcnq2.PF  
417 ECTSPTEKQGRASSFLVYVLEKDAKKEFSTYADALWNGTITLTITIGYGDKTPLTWLGRLL kcnq4.PF

424 TKVQKSSSFNDRTFPLSLRLSSQKPVIDADTALGTDVVDYDERGQCDVSVEDLTTF kcnq5.PF  
450 SKVQKSSSFNDRTFPLSLRLSSQKPVIDADTALGTDVVDYDERGQCDVSVEDLTTF kcnq2.PF  
457 TKVQKSSSFNDRTFPLSLRLSSQKPVIDADTALGTDVVDYDERGQCDVSVEDLTTF kcnq4.PF

484 KTVLEAARIRIKKLVAREKFKETLRPVVDVIEQYSAGHLDMGRIKSLQRYVDQVVGRC kcnq5.PF  
509 KTVLEAARIRIKKLVAREKFKETLRPVVDVIEQYSAGHLDMGRIKSLQRYVDQVVGRC kcnq2.PF  
511 KTVLEAARIRIKKLVAREKFKETLRPVVDVIEQYSAGHLDMGRIKSLQRYVDQVVGRC kcnq4.PF

544 QITSDKKSREKLT--AEHEITDLSMLGRVVKVEKQVQSIESKLDCLLDIYVQVDRKGS kcnq5.PF  
569 PAITDKDR--TKGFAEAELEPEDLSMMGRVVKVEKQVQSIESKLDCLLDIYVQVDRKGS kcnq2.PF  
591 P-GDRKAREKDKGSDAIVVDLTSMMGRVVKVEKQVQSIESKLDCLLDIYVQVDRKGS kcnq4.PF

601 ASATALLAEPQPFECQRTDYQVPSVDSKDLGSAQNSGGLSRSTSANISAGLQFILTPN kcnq5.PF  
623 PAVTGGVYEGAKLEEDPAPFVHSGSEGLVHVOVQGLIVKIVRSSG-----QK kcnq2.PF  
649 SASVGG-AVQVLEEDPAPFVHSGSEGLVHVOVQGLIVKIVRSSG-----QK kcnq4.PF

661 EFGAQTFYALS TMHSQCATQVPISSDGSAAVAANTIANQINTAPKPAAPTTLQLPPLPL kcnq5.PF  
672 NFAPAP--PAAIPVQCPPSTSNQPSHPRQGHCTSPVGDH-----GSLVRLPPPPA kcnq2.PF  
684 ----- kcnq4.PF

721 AIKHLPREPTELHPNPAGLQESISDVTCLVASKENYVQVQSNLTKDRSMRKSFDMGGEFL kcnq5.PF  
720 HERSLSAYGGGNRASMEFLRQEDTPGCL-----RPPEGTL-----RDSDFL kcnq2.PF  
694 ----- kcnq4.PF

781 LSVCPMPKPKDKGKSLVYQNLIRSTSGLNSLQVLSGSESSSGRGQDFYPKWRRESKLPITDES kcnq5.PF  
760 ISLPSVDHEELERSPGFSTISQSKNLDA-LSNGCYAAVAPCAK-----VRPVYLAEGS kcnq2.PF  
694 LSLSRSTNM----- kcnq4.PF

841 VGPBETETDTFDAAFPQAREAAAFASDSLRTGRSSSSQSIKAGESTDALSLPHVKLK kcnq5.PF  
811 SDTSDSLCTPCGPPFRSATGEGPFGVGAAGPRKK----- kcnq2.PF  
695 ----- kcnq4.PF

Decoration 'Decoration #1': Shade (with solid black) residues that match the Consensus

Figure 2

Fig. 3 A.)

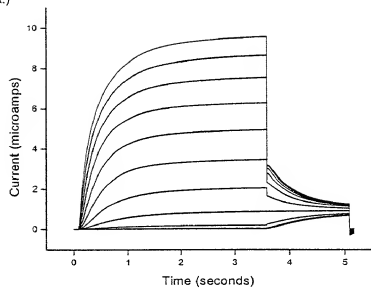


Fig. 3 B.)

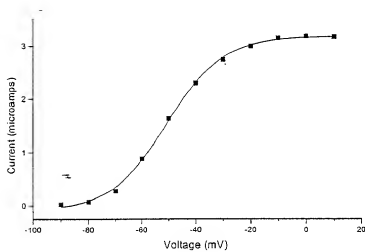
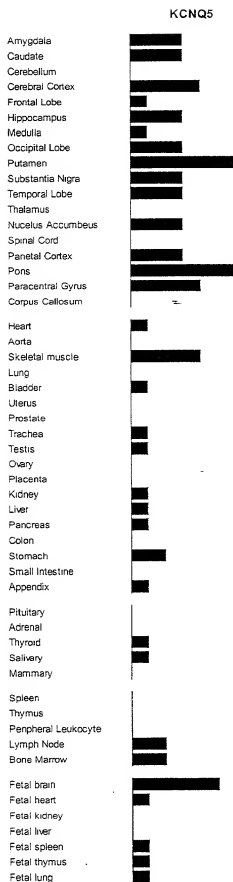


Figure 3

Figure 4



SCANNED, # 6

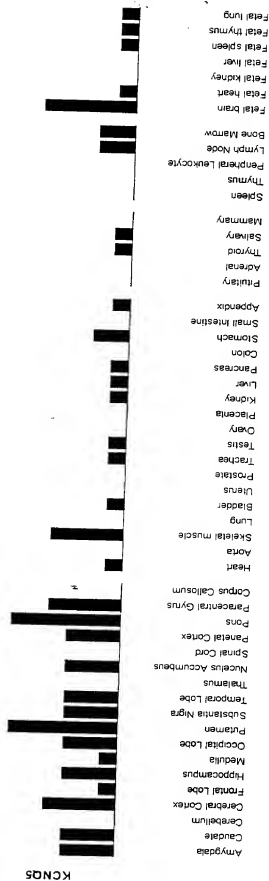


Figure 4